

Solid Waste Division

TALES VASTE-LESS LAND

Master Recycler Composter (MRC) Volunteer Newsletter

Fall 2001

Bio-Diesel in the Skagit Valley

By Anna Hosick-Kalahan (Skagit County MRC), an article from the June 2001 edition of the Skagit County MRC quarterly newsletter, Wasting Away:

In the face of fuel shortages and rising petroleum prices, the need for alternative fuels is coming to the forefront of American thinking. Many technologies for alternative energy and fuel sources have been in existence for a long time, but few of them have received much attention until now.

One of these fuel sources is biodiesel: converted vegetable oil that can be used in place of petroleum diesel. The beauty of biodiesel is that it can be made from oil that has already been used for another purpose. In this nation which is addicted to eating deep-fried foods, sources of used vegetable oil are vast and renewable!

Erin Deller and Terrence Meyer of Rockport [WA – Skagit County] have been driving bio-diesel vehicles since November of 2000. Erin commutes to North Cascades Institute in Sedro-Woolley, and Terrence to Trace Engineering in Arlington. Because of the issues surrounding fuel shortages and global warming,

Terrence, who has a mechanical engineering degree from UC Berkeley, decided to make some changes in his own life that would have a real, positive impact on the environment. He bought a small bio-diesel processor that had been built by a mid-western professor and began processing his own bio-diesel in 50-gallon batches. Last fall, he and his partner, Erin, began running their diesel-engine 1980 Mercedes station wagon on biodiesel, and were pleased to find that their car didn't skip a beat. Since then, they've bought an older VW diesel Rabbit and are fueling it with bio-diesel as well.

Erin and Terrence obtain their used oil from a couple of Up-River gas station/restaurants. The businesses are happy to give it away for free because otherwise they would have to pay to dispose of it, as the EPA considers used fryer oil a toxic waste. Currently there are several industries that process used vegetable oil, such as the cosmetics industry, but a large amount of it goes to landfills all over the nation.

Processing vegetable oil into biodiesel is not for the faint of heart: it requires the careful use and mixing of methanol or ethanol and potassium hydroxide, or lye. (Terrence and Erin have been getting methanol from Georgia Pacific in Bellingham, where it is produced as a waste product of the pulp industry. Since GP has shut down, however, they have been exploring other sources.) The mixing of these two chemicals creates methoxide, which must be carefully handled. This mixture is then added to five gallons of used, filtered oil, mixed for an hour, then left to settle. What is created is 2 layers: bio-diesel floating on top, and glycerin on the bottom. The glycerin makes great soap, or can be used in many other ways. Because Erin and Terrence used potassium hydroxide instead of sodium hydroxide, this glycerin can also be composted.

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2002 Compost Bin Distribution Planning in the Works!

King County, Seattle Public Utilities and suburban cities are already planning for 2002 compost bin distribution events. Through this centralized planning process, these entities hope to distribute at least 8,000 compost bins county wide in 2002. Education will be a key component of the compost bin distribution events to encourage residents to take an active role in composting. MRCs will play an important role in effectively educating participants at these events. Outreach opportunities for these events will be announced in a future newsletter or mailing.

What are some of the issues that are being considered in the planning?

First, a variety of bin distribution methods are being considered, such as:

- large event sales
- community event sales, for example: farmers markets and Earth Day celebrations
- suburban city distributions and sales
- retail sales of compost bins



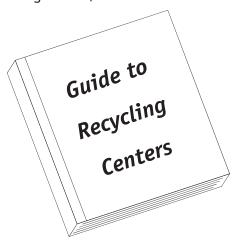
Second, a variety of resource conservation tools will likely be offered to encourage King County residents to focus on developing an integrated landscape conservation ethic. Products addressing more than one resource conservation topic will be featured (solid waste reduction, hazardous waste reduction, water conservation, surface water management). In addition to compost bins and mulching mowers, these products might include organic fertilizers, weed pulling tools, soil corers, soaker hoses, rain barrels, and corn gluten (a nontoxic herbicide).

Sound interesting? You can contact Gerty Coville at King County Solid Waste by E-mail at gerty.coville@metrokc.gov or by phone at (206) 296-8459 with questions and comments.

"Guide to Recycling Centers"

Thanks to the diligent efforts ▲ of Annette Gomez (Class 22), the County has recently updated many parts of the "Guide to Recycling Centers" that many of you received during your training. Annette made many calls to help update the document. Please recycle all of your old copies! To get the most current information check out the web site at http://dnr.metrokc.gov/ swd/resrecy/recycling/ rec locations.shtml If you would like to have a hard copy with the newest info, thanks to Annette,

please call the hot line or E-mail the volunteer coordinator (<u>nanda@cascadiaconsulting.com</u>) and ask for a copy of the "Recycling Bible", as Annette coined



it. This is a very handy reference that can be used as a great tool during outreach efforts for the next few months (until the next updates are made). Thank you for your cooperation!

Compost Brochure Overhaul

any thanks to Deb Natelson Many thanks to bearing (Class 19), Dwight Stevens (Class 9), and Paul Martin (Class 13) who recently reviewed the Solid Waste Division's existing compost -related brochures. The Solid Waste Division is interested in updating or consolidating these brochures in an effort to present concise information in the most useful form for the public and values the perspective of compost-savvy MRCs who know what folks are most drawn to at events. Thanks for your time and input, gang! Keep using the existing compost brochures in your outreach efforts, MRCs. We'll let you know when new ones are produced.



If you would like to highlight an MRC for a job well done, here is the place! Call the HOT LINE with your nominations (206-343-8505).

Although they only completed their MRC training a few short months ago, MRC Class 23 members are successfully completing their 40 hours and more, making quite a difference in their communities. Check out what some of the newest MRCs are doing...

Wynn Converse - Ever-enthusiastic and always willing to help, Wynn really knows his MRC stuff! Whether it be at a booth trying to draw people in to talk about their compost needs, or digging out blackberries with school children in the rain, he is always successful in getting the message across. Wynn also has recently become a salmon habitat restoration steward and spends his time sharing this important information, as well as good composting tips, at numerous events throughout the County. Wynn is truly busy and seems to enjoy every minute of his outreach!

Deb Petrak Green – Deb is knowledgeable, dedicated, and on top of her composting game! She has volunteered at numerous events as well as created time in her schedule to compile information and conduct a series of composting classes for the City of Issaquah. Both the City and attendees of the classes found

them to be engaging and incredibly helpful to their composting and recycling efforts. Amidst all of this activity, Deb also has found time to help edit a fellow MRC's "Recycling Bible" – soon to be released and available to all MRCs as a remarkable recycling resource (see article: **Guide to Recycling Centers**, page 2).

Wynn and Deb, you really are model MRCs! And to all members of Class 23, we appreciate all of your hard work these last few months and look forward to your continued dedication to the program!

Many thanks to *Annette Gomez* (Class 22) for making many calls to recycling collection centers in an effort to help keep the Solid Waste Division's recycling resource web site information current (visit http://dnr.metrokc.gov/swd/resrecy/recycling/recycling.shtml). She has helped immeasurably to ensure that the public receives up to date information!

We want to hear from you:
Do you have any stories to
share with MRCs, tales you've
learned along the way, or valuable pieces of information that
everyone should know? We want
to publish your thoughts in our
next newsletter. We know you
are active in the community

in various capacities and there is much you have learned that would benefit your fellow MRCs. Please submit any articles, stories, poems, etc. to the volunteer coordinator via E-mail (nanda@cascadiaconsulting.com) or post mail (811 First Avenue, Suite 480; Seattle 98104) before NOVEMBER 15 for the Winter 2001 Tales from the Waste-less Land. We look forward to hearing from you.

Request from a fellow MRC: Marjorie Rosen (Class 18), is currently putting together information to create a curriculum packet for MRCs to use when they conduct outreach in the classroom. She is looking for any lessons, activities, games and fun-facts that can be used when teaching children about worm composting, what can and cannot be recycled, and more. If you have any success stories from past teaching experiences, or tidbits of information you would like to see in this curriculum, please contact Marjorie via phone (425-487-8605) or E-mail (marjorie11@earthlink.net) -she would love to hear from you!

Waste-Free Holidays!

The holidays aren't so far away! Did you know that between Thanksqiving and New Years, an additional one million tons of trash are generated weekly in the United States? As an incentive to give presents without all the trash, consumers will receive discounts of up to 50% when purchasing qift certificates or tickets from participating King County arts, entertainment, sporting organizations and restaurants every day between Thanksqiving and New Years. Consumers need only mention the Waste Free Holidays program to receive their discount. A complete list of participants will be on the King County web site beginning November 24. Waste-Free Holidays provides a wonderful opportunity to give gifts without the waste of

wrapping, while making a positive contribution to waste reduction. (And, your gift won't end up in a closet, unused!)
To find out more about the program, check the web site http://dnr.metrokc.gov/swd/ResRecy/wfh.htm. And, beginning November 24, go to www.metrokc.gov or call 206-NOSTUFF (667-8833), 1-800-6388 (TTY Relay) for more information or to purchase online.

LinkUp Program

LinkUp, sponsored by the King County Solid Waste Division's Waste Reduction and Recycling program, uses a team of specialists to provide customized technical and marketing expertise to manufacturers that use recycled materials in their products. The program currently works with

businesses in King, Pierce and Snohomish counties. In the past, the county has focused marketing efforts on getting consumers and businesses to buy recycled products. LinkUp takes this one step further by partnering with manufacturers to use more recycled materials in the products they make. Businesses participating in the LinkUp program during the past year cited increased sales as well as heightened customer and product awareness in a recent survey conducted by King County. The LinkUp program has budgeted \$250,000 for assisting manufacturers in 2002. For more information, visit http:/ /dnr.metrokc.gov/market/linkup or contact Ery Sandlin at erv.sandlin@metrokc.gov or call him at (206)296-0233.

Linkup

Bio-Diesel — continued from page 1

Although Terrence and Erin bought their processor, one could be made using a 50-gallon drum and some other easily obtainable materials. There is a lot of information available now, due in part to the publicity tour of the "Veggie-Van", a converted motor-home that crossed the country towing a small trailer-processor and running solely on used fryer-grease. From the Fryer to the Fuel Tank: The Complete Guide to Using Vegetable Oil as an Alternative Fuel by Joshua Tickell describes the "Veggie-Van tour", and is a good how-to reference manual

for making and using bio-diesel. The book also compares the emissions of bio-diesel to petrol, highlighting the fact that carbon dioxide (the greenhouse gas) emissions of bio-diesel are often reduced by 100 percent, and that it burns up to 75 percent cleaner than petroleum diesel.

So, if you see a 1980 Mercedes wagon driving around with the license plate BIODESL, sniff the air for a tell-tale French-fry smell, and know that you're witnessing a successful alternative to petroleum in action!

Check out some of these web sites for more information on bio-die-sel:

- Veggie-Van web site www.veggievan.org
- Bio-Diesel Industries www.pipeline.to/biodiesel
- National Bio-Diesel Board
 <u>www.biodiesel.org/</u>
 default2.htm
- Grassroots Bio-Diesel <u>www.dancingrabbit.org/</u> biodiesel
- Bio-Diesel Open Forum www.biodiesel.infopop.net

September Compost Promotion!

"A nation that destroys its soils destroys itself." - Franklin D. Roosevelt

King County Department of Natural Resources and Seattle Public Utilities have teamed up with local nurseries and garden centers to bring their customers special savings on compost during the month of September. The campaign seeks to raise awareness of the vital role soil plays in our ecosystem and the impact that urban activities have on it, as well as increase the use of compost by homeowners. The public agencies will undertake a media campaign that spreads the "Soils for Salmon" message of the environmental benefits of healthy soils, water conservation and reduced fertilizer and pesticide use, as well as providing educational brochures for display in the participating nurseries. The nurseries will promote compost use by offering discounts of up to 30% on approved compost products.

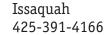
For more information, call the King County Department of Natural Resources at 206-296-3740 or look on our web site www.metrokc.gov/soils. The special values can be found at the following participating retail nursery or garden centers in King County:

Classic Nursery & Landscape Company Redmond 425-885-5678

Cottage Creek Nursery Redmond 425-883-8252

Furney's Nursery Bellevue 425-747-8282

Des Moines 206-878-8761 Hayes Nursery



Magnolia Garden Center Seattle 206-284-1161

Molbak's Pike Place Market, Seattle 206-448-0431

University Village, Seattle 206-754-6500

Woodinville 425-483-5000

Ranniger's Kent Nursery Kent 253-854-1767

Swanson's Nursery & Greenhouse Seattle 206-782-2543

The Home Depot Bellevue 425-451-7351

Bothell 425-806-9300

Issaquah 425-391-8467

Kent 253-852-1017

Seattle - Bitterlake 206-361-9600

Seattle - Lander 206-467-9200

Seattle - North Aurora 206-546-1900

Tukwila 206-575-9200

Have you completed your 40 hours?

We want to congratulate all of those MRCs who have completed



their 40 hours of community outreach, and encourage you all to continue sharing your expertise. By remaining active in the MRC program you are eligible to attend the fun and informative continuing education trips as well as receive a free MRC sweatshirt once you have reached 100 volunteer hours. You are an extremely valuable resource and we look forward to working with you in the future!

It's All in the Sorting!

Ever wondered how commingled recycling really works? Now is your chance to see a sorting line in action and to have all of your questions answered. Please join

Kim Ducote for a tour of Rabanco's facility at Third and Lander in Seattle. This Continuing Education trip is scheduled for September 25. We will meet at 6:30 and will be done by 8:00 at the

latest. A quick yet

informative continuing education experience!

DETAILS: Meet at Rabanco Recycling Facility, 2733 3rd Ave S. - one mile south of Safeco Field (directions below). Please WEAR STURDY SHOES--no open toes. The facility may be chilly so you'll need to dress for the weather. Please RSVP to the hot line (206-343-8505) or via E-mail by Wednesday, September 19th. Hope to see you there!

DIRECTIONS to Rabanco:

From the South

I-5 North: take Exit #163, follow signs down onto Spokane St., turn right (north) onto 4th

Ave. S., turn left onto

S. Lander St., turn left onto 3rd Ave. S., turn right at first opportunity into parking lot.

From the North
I-5 South: take Exit
#164, follow signs to 4th
Ave. S., turn right (South)

at T intersection onto 4th Ave. S., follow 4th Ave. S. approximately 1 mile to S. Lander St., turn right onto S. Lander St., Turn left onto 3rd Ave. S., turn right into parking lot.

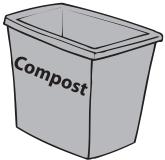
From the East

I-90 West: follow to end, turn right (south) at T intersection onto 4th Ave. S., follow 4th Ave. S. approximately 1 mile to S. Lander St., turn right onto S. Lander St., turn left onto 3rd Ave. S., turn right into parking lot.

Tooking for a place to recycle Livarious materials from drywall to cell phones to #6 plastics? A great resource you should check out is the "Where to Recycle and Reuse" link from the Metrokc web site. From www.metrokc.gov. click on "Business Resources" and then "Business Recycling". From here, look for "Where to Recycle and Reuse" under "Recycling Assistance". Note, not all of the sites listed are for businesses only, we recommend calling each organization before bringing your recyclables.

Office Composting

Awhopping thank you to Jo (Goeldner) Sullivan (Class 22) who so generously and cheerfully kept a watchful eye on a food waste bucket for a year in the Solid Waste Division's 7th floor kitchen in the King Street Center building in downtown Seattle. Each week,



a member of the Danny Woo P-Patch just up the hill from the office picks up the bucket and deposits it in the Patch's worm bin for composting. Thanks Jo! And thanks to Kris Beatty, a Solid Waste Division employee in the Waste Reduction/Recycling Section who has graciously (and enthusiastically!) offered to tend the bucket for awhile. How's that for office waste reduction and recycling?!

New Venue of the Month: Marymoor Park and Kent Public Gardens

Do you enjoy relating composting to gardening? The King County Community Garden Coordinator wants to create working compost demo sites at two local gardens. The Garden Coordinator would love to have an MRC assist the gardeners each step of the way. The first step of this process will be to construct 3-bay turning bins. Then the gardeners will need education on what can and cannot be added to the compost bins and what exactly needs to be done to create beneficial compost. This is a great opportunity to adopt-a-garden. Please contact Nanda at 206-343-9759 x116 or nanda@cascadiaconsulting.com if you are interested in helping out at one of these gardens.

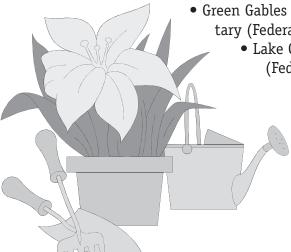
Like a Good Neighbor. . .

Nassociation based in Woodinville. This group goes to local grocery stores seven days a week to gather items that would usually go in the trash. The group distributes items among their membership and to the needy in our community. Literally tons of food are distributed each year. The Good Neighbor Gleaners also gather other items that would have entered the waste stream. They have gathered sawdust, household items, wood and other things for distribution. They also join together and bulk buy items like spices, flour and meats, which cuts down on packaging. The group has over 40 members, many of whom have worm bins for the disposal of food which cannot be eaten. The Good Neighbor Gleaners also go to farms in eastern and western Washington to harvest fruits and vegetables that escaped harvest as well as to glean overages in people's gardens and orchards. Wow! Feel free to contact Nancy at nancyhovan@juno.com or 425-788-2259 for more information.

Green Team Gardens

The following elementary schools planted or maintained gardens (vegetable, herb, or butterfly/flower gardens) through the County's Green Team program in the 99-00 and 00-01 school years. If you are interested in offering follow-up assistance to one of these schools, call Sara Gersten-Rothenberg at Triangle Associates, 206-583-0655. Sara can put you in touch with the Green Team leader at the school.

- Audubon Elementary (Lake Washington)
- Beverly Park Elementary (Highline)
- Cherry Valley Elementary (Riverview)
- Crestwood Elementary (Kent)
- Enatai Elementary (Bellevue)
- Evergreen School (Shoreline)



 Green Gables Elementary (Federal Way) Lake Grove Elementary

- (Federal Way)Meredith Hill Elementary (Federal Way)
 - North Creek School (Northshore)

"You'll be

- Rock Creek Elementary (Tahoma)
- Sunny Hills Elementary (Issaquah)
- Westwood Elementary (Enumclaw)

Upcoming Outreach:

PLEASE CALL THE HOT LINE – (206) 343-8505 – WITH YOUR AVAILABILITY FOR ONE OR MORE OF THE EVENTS LISTED BELOW.

- 9/22 Special Collection Event for the City of Snoqualmie – Area residents will be dropping off their hard-to-recyclables and will need information and answers to their questions. Please come help out at this fun Saturday event. SHIFTS: Sat 9/22: 8:30-12; 12-3
- 9/30 10/2 National Recycling Coalition conference Help with a variety of recycling related activities in the exhibit hall and reception. You'll be the expert and also have the possibility of attending some sessions at this annual, informative conference for free. Please call Nanda at 206-343-9759 x116 for more details on hours needed to volunteer in order to attend sessions for free. SHIFTS: Sun 9/30: all filled; Mon 10/1: 8-11; Tues 10/2: 11-2.

one in the North end
(Woodinville) and
one in the South
(Enumclaw) -- Give
all people from urban
and rural KC a chance to

tour about 20 different farms throughout the county and really understand their significance and beauty. At two of the farms along the way, MRC booths will be set up to answer composting and soil health questions, and to explain how everything is related. We need MRCs in the North and South ends of the county to staff these booths.

Continued on back cover

Swap & Save!

Please call the hot line (206-343-8505) if you have any extra materials or if you are looking for something in particular. Your request will appear in this section of the next MRC newsletter. This is a brand-new forum for getting rid of any extra materials you may have lying around the house, and/or for asking other MRCs if they have something you are looking for.

Outreach — continued from page 7

- ...Farm tours... SHIFTS (both locations): Sat 10/6: 10-1; 1-4.
- 10/6 & 10/7 Issaquah Salmon Days Salmon, soil health, water quality, compost, environmental responsibility...they're all related, and MRCs know more about these topics than most people. Help out at the County booth and share your knowledge while having fun and saving the salmon. SHIFTS: Sat 10/6: 10-2; 2-6; Sun 10/7: 10-2; 2-6.
- 10/11 10/14 Seattle Home Show 2 This event will focus on sustainable building and landscaping. MRCs will talk about healthy soils and encourage people to fill out a drawing for free compost. Takes place at the Stadium Exhibition Center near Safeco Field. SHIFTS: Thu, 10/11: 9:45-1:30; 1:15-5; 4:45-8:30; Fri, 10/12: 9:45-1:30; 1:15-5; 4:45-8:30; Sat, 10/13: 9:45-1:30; 1:15-5; 4:45-8:30; Sun, 10/14: 9:45-12:45; 12:30-3:30; 3:15-6.
- 10/13 Molbak's Nursery Q&A A lot of people, many questions, the need for information, and you. SHIFTS: Sat, 10/13: 10-12



Solid Waste Division

King Street Center 201 South Jackson St. Seattle, Washington 98104-3855